AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An optical network comprising:

first and second adjacent nodes;

a first fiber configured to carry information in a clockwise direction from the first node to the second node, the first fiber having wavelength capacity allocated to working and protection traffic, the working and protection wavelength capacities in the first fiber being respectively assigned to first and second sets of wavelengths; and

a second fiber configured to carry information in a counter-clockwise direction from the second node to the first node, the second fiber having wavelength capacity allocated to working and protection traffic, the working and protection wavelength capacities in the second fiber being respectively assigned to the second and first sets of wavelengths,

wherein the first and second sets of wavelengths are within a wavelength range, and a portion of the wavelength range is not assigned to either the first or second set of wavelengths, the unassigned portion being used to provide isolation between the

working and protection wavelength capacities of each of the first and second fibers, wherein

the wavelength range includes a plurality of bands allocated among the unassigned portion and the first and second sets of wavelengths, and

one or more of the bands of the first set of wavelengths are interleaved with one or more of the bands of the second set of wavelengths, such that each band of the unassigned portion separates an interleaved band of the first set of wavelengths from an interleaved band of the second set of wavelengths.

2. (Cancelled)

3. (Currently Amended) The optical network of claim ~~2~~ 1, wherein each interleaved band of the first and second set of wavelengths, respectively, comprises three wavelength channels, and each band of the unassigned portion comprises three wavelength channels.

4. (Previously Presented) The optical network of claim 1, wherein

each of the first and second sets of wavelengths, respectively, comprises multiple bands that are grouped together in the wavelength range, and

the first set of wavelengths is separated from the second set of wavelengths by the unassigned portion, the unassigned portion comprising a single band.

5. (Previously Presented) The optical network of claim 4, wherein each of the bands of the unassigned portion and the first and second sets of wavelengths, respectively, comprises three wavelength channels.

6. (Previously Presented) The network of claim 1, the network being configured to operate in one of a working and protect state, wherein

in the working state, the first node is configured to transmit traffic in the clockwise direction to the second node as working traffic, which is carried by the working capacity in the first fiber, and

in the protection state, the first node is configured to transmit the traffic in the counter-clockwise direction to the second node as protection traffic, which is carried by the protection capacity in the second fiber.

7. (Previously Presented) The optical network of claim 6, wherein the optical network is configured to switch from the working state to the protection state in response to a fiber failure.

8. (Previously Presented) The optical network of claim 1, wherein:

the first node includes:

a first mulitplexing/demultiplexing module operable to send working traffic and receive protection traffic over the working and protection wavelength capacities, respectively, of the first fiber; and

a second mulitplexing/demultiplexing module operable to receive working traffic send protection traffic over the working and protection wavelength capacities, respectively, of the second fiber, and

the second node includes:

a first mulitplexing/demultiplexing module operable to receive working traffic and send protection traffic over the working and protection wavelength capacities, respectively, of the first fiber; and

a second mulitplexing/demultiplexing module operable to send working traffic and receive protection traffic over the working and protection wavelength capacities, respectively, of the second fiber.

9. (Previously Presented) The optical network of claim 8, wherein each of the first and second mulitplexing/demultiplexing modules in the first and second nodes, respectively, includes:

one or more filters operable to partition the working and protection wavelength capacities in a corresponding one of the first and second fibers.

10. (Previously Presented) The optical network of claim 1, wherein each of the first and second mulitplexing/demultiplexing modules in the first and second nodes, respectively, includes:

a filter operable to extract the unassigned portion of the wavelength range in a corresponding one of the first and second fibers.

11. (Currently Amended) An optical network comprising:

first and second adjacent nodes;

a first fiber configured to carry information in a clockwise direction from the first node to the second node, the

first fiber having wavelength capacity allocated to working and protection traffic, the working and protection wavelength capacities in the first fiber being respectively assigned to first and second sets of wavelengths; and

a second fiber configured to carry information in a counter-clockwise direction from the second node to the first node, the second fiber having wavelength capacity allocated to working and protection traffic, the working and protection wavelength capacities in the second fiber being respectively assigned to the second and first sets of wavelengths,

wherein the first and second sets of wavelengths are within a wavelength range, and a portion of the wavelength range is not assigned to either the first or second set of wavelengths, the unassigned portion being used to provide isolation between the working and protection wavelength capacities of each of the first and second fibers ~~The optical network of claim 10~~,

wherein the first and second fibers, respectively, are configured to carry unprotected traffic over the unassigned portion.

12. (Currently Amended) A method of operating a ring network including first and second nodes operably connected by

first and second bi-directional optical fibers, the method comprising:

allocating a first set of wavelength channels in a wavelength range as both working wavelength capacity in the first fiber, and protection wavelength capacity in the second fiber;

allocating a second set of wavelength channels in the wavelength range as both protection wavelength capacity in the second fiber, and working wavelength capacity in the ~~second~~ first fiber~~,~~ and

allocating one or more wavelength channels in the wavelength range as unprotected wavelength capacity in the first and second fibers, wherein the unprotected wavelength capacity is configured to provide isolation between the working and protected wavelength capacities in each of the first and second fibers, wherein

each of the first and second sets of wavelength channels is allocated to comprise a plurality of bands, each band containing one or more adjacent wavelength channels within the wavelength range,

at least some of the bands in the first and second set of wavelength channels are interleaved within the wavelength range, such at least one wavelength channel allocated to the

unprotected wavelength capacity separates an interleaved band of the first set of wavelength channels from an interleaved band of the second set of wavelength channels.

13. (Cancelled)

14. (Previously Presented) The method of claim 12, wherein

each of the first and second sets of wavelength channels is allocated to comprise a plurality of adjacent bands in the wavelength range, each band containing one or more wavelength channels,

the bands of the first set of wavelength channels is separated from the bands of the second set of wavelength channels by the wavelength channels allocated to the unprotected wavelength capacity.

15. (Previously Presented) The method according to claim 12, wherein,

when the ring network is operating in a working state:

transmitting traffic from the first node to the second node over the working wavelength capacity of the first fiber in a clockwise direction with respect to the ring network, and

transmitting traffic from the second node to the first node over the working wavelength capacity in the second fiber in a counter-clockwise direction with respect to the ring network; and

when the ring network is operating in a protect state:

transmitting traffic from the first node to the second node over the protection wavelength capacity on the second fiber in the counter-clockwise direction with respect to the ring network;

transmitting traffic from the second node to the first node over the protection wavelength capacity in the first fiber in a clockwise direction with respect to the ring network.

16. (Previously Presented) The method of claim 15, further comprising:

switching the ring network from the working state to the protection state in response to a fiber failure.

17. (Previously Presented) The method of claim 12, further comprising:

filtering, at each node of the ring network, a signal on the first and second fibers, respectively, to partition the working and protection wavelength capacities.

18. (Previously Presented) The method of claim 12, further comprising:

performing, at each node of the ring network, two-stage filtering of a signal on the first and second fibers, respectively, the two-stage filtering including:

pre-filtering a signal on the first and second fibers, respectively, to extract the unprotected wavelength capacity of the respective fiber; and

filtering the pre-filtered signal of the first and second fibers, respectively, to partition the working and protection wavelength capacities of the respective fiber.

19. (Currently Amended) A method of operating a ring network including first and second nodes operably connected by first and second bi-directional optical fibers, the method comprising:

allocating a first set of wavelength channels in a wavelength range as both working wavelength capacity in the first fiber, and protection wavelength capacity in the second fiber;

allocating a second set of wavelength channels in the wavelength range as both protection wavelength capacity in the

second fiber, and working wavelength capacity in the first fiber;

allocating one or more wavelength channels in the wavelength range as unprotected wavelength capacity in the first and second fibers, wherein the unprotected wavelength capacity is configured to provide isolation between the working and protected wavelength capacities in each of the first and second fibers; and ~~The method of claim 12, further comprising:~~

carrying unprotected information between nodes of the ring network over the unprotected wavelength capacities of the first and second fibers, respectively.